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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,289	11/12/2001	Do Hyung Kim	DAE-0001	5339

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EXAMINER

DANG, KHANH NMN

ART UNIT	PAPER NUMBER
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2111

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DATE MAILED: 05/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/054,289

Applicant(s)

KIM, DO HYUNG

Examiner

Khanh Dang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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DETAILED ACTION

Claim Rejections - 35 USC § 112

Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is directed to an apparatus. However, the essential structural cooperative relationship(s) between elements recited in the claims such as "an interface," "at least one signal line," and "a voltage regulator" have been omitted, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

Claim 1 is directed to an apparatus. However, the essential structural cooperative relationship(s) between elements recited in the claims such as "an interface" and "at least one signal line", such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 6, and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by the acknowledged prior art of Fig. 1 in view of Karlsson et al.

With regard to claim 1, 6, and 17, the prior art disclose a universal serial bus device (USB device) to be initialized as a state enabling a communication with a host (1), the host storing a real descriptor (REDES) and a descriptor recognizing program (1a) comprising: an interface (10) storing a predetermined basic descriptor (stored in 20), the interface primarily activating an initialization signal and transferring the basic descriptor (stored in 20) to the host (1) to perform a primary initialization, at least one signal line (40); and a voltage regulator (30) including a transistor and a resistor.

According to the prior art, since the memory (20) is placed outside of the USB interface (1), the basic descriptor cannot be changed by downloading the real descriptor (REDES) from the host (1). The prior art does not disclose that the memory (20) can be placed in the USB interface (10) so that the basic descriptor can be changed by downloading the real descriptor (REDES) from the host (1). Karlsson et al. discloses the use of a memory (14, for example) placed inside the interface circuit 30 to store data information and protocol information (descriptor) and can be changed by the host. It would have been obvious to one of ordinary skill in the art at the time the invention was made to place the memory (20) of the prior art in the USB interface (10), as taught by Karlsson et al., for the purpose of being able to change the descriptor by downloading the descriptor from the host.

Claims 9 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by the acknowledged prior art of Fig. 1 in view of Karlsson et al., and further in view of the following.

With regard to claims 9, the prior art disclose a universal serial bus device (USB device) to be initialized as a state enabling a communication with a host (1), the host storing a real descriptor (REDES) and a descriptor recognizing program (1a) comprising: an interface (10) storing a predetermined basic descriptor (stored in 20), the interface primarily activating an initialization signal and transferring the basic descriptor (stored in 20) to the host (1) to perform a primary initialization, at least one signal line (40); and a voltage regulator (30) including a transistor and a resistor. According to the prior art, since the memory (20) is placed outside of the USB interface (1), the basic descriptor cannot be changed by downloading the real descriptor (REDES) from the host (1). The prior art does not disclose that the memory (20) can be placed in the USB interface (10) so that the basic descriptor can be changed by downloading the real descriptor (REDES) from the host (1). Karlsson et al. discloses the use of a memory (14, for example) placed inside the interface circuit 30 to store data information and protocol information (descriptor) and can be changed by the host. It would have been obvious to one of ordinary skill in the art at the time the invention was made to place the memory (20) of the prior art in the USB interface (10), as taught by Karlsson et al., for the purpose of being able to change the descriptor by downloading the descriptor from the host. The further difference between the claimed subject matter and that of the prior

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art is that in the prior art, the voltage regulator (30) is disposed outside of the interface 10 whereas in the claimed invention, the voltage regulator is disposed inside the interface. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have disposed the voltage regulator (30) in the interface (10), since such a modification only involves a design choice. Further. One would have preferred to place the voltage regulator in the interface for reducing the number of separately manufactured components, and thereby reducing cost.

Allowable Subject Matter

Claims 2-5, 7, 8, 10-13, 15, and 16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

U.S. Patent Nos. 6,490,637 to Shih, 6,009,480 to Pleso, and 6,088,785 to Hudson et al. are cited as relevant art.

Any inquiry concerning this communication should be directed to Khanh Dang at telephone number 703-308-0211.



Khanh Dang
Primary Examiner